The international environment

- *This article discusses developments in the international environment since the May 2000* Quarterly Bulletin,(1) *as well as the outlook for inflation and output over the next two years.*

- *World GDP is estimated to have grown by 1.4% in the first quarter, an acceleration from 1.1% in the last quarter of 1999. But world industrial production growth has slowed since February 2000; growth rates have remained stable and high in the major economies, but, although still high, have fallen somewhat in the emerging market economies since the beginning of the year.*

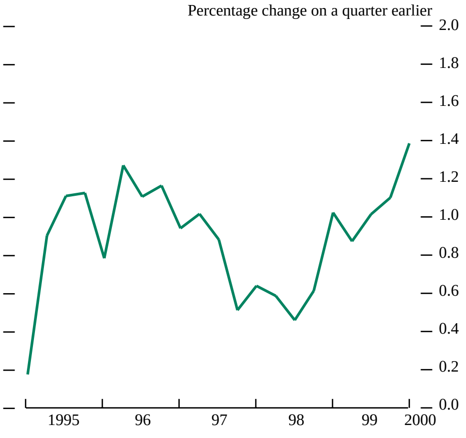
- *In the United States, GDP grew strongly in Q1 and Q2, albeit at a slower pace than in the preceding quarters. In the euro area, GDP growth was faster in Q1 than in the final quarter of 1999 and growth strengthened in Germany and Italy. The Japanese economy grew at a quarterly rate of 2.4% in the first quarter, after a fall in measured output in the previous quarter.*

- *Oil price volatility has been high, reflecting uncertainties about the future balance of demand and supply. There have been signs of a renewed pick-up in producer and consumer price inflation in response to the oil price increases from mid-April to June.*

- *Official interest rates in the United States and the euro area have increased further since the previous* Quarterly Bulletin. *Both the FOMC and the ECB raised their rates by 0.5 percentage points, to 6.5% and 4.25% respectively. The Bank of Japan has maintained the zero interest rate policy implemented in February 1999.*

- *Projections by external forecasters are for world GDP growth to rise by around 4.5% in 2000, the highest growth rate for a decade, and by approximately 4% in 2001. Since the previous* Quarterly Bulletin, *there have been upward revisions to forecasts for GDP growth in the United States and the euro area, while for some emerging market economies, especially in South East Asia, forecasts have been scaled down slightly. The balance of risks around most forecasts is little changed from three months ago, typically indicating a balance of risks on the downside, primarily for reasons linked to the possibility of asset markets falling.*

Chart 1
World GDP



Source: Bank of England.

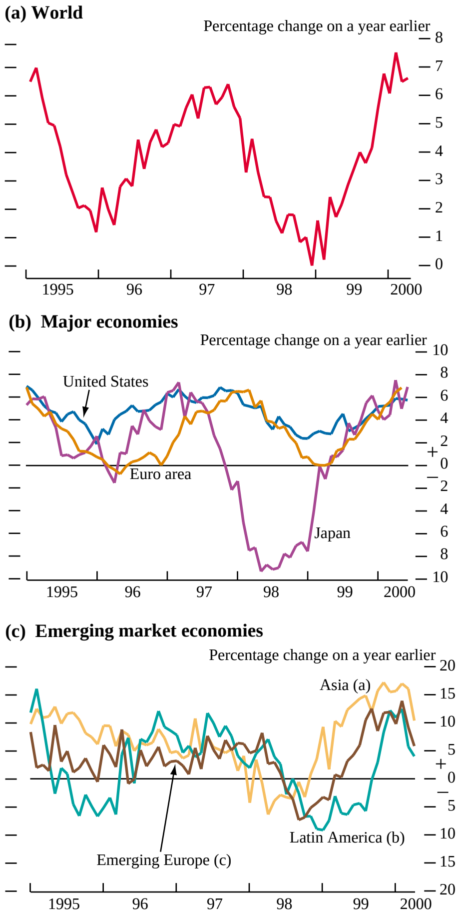
Demand and output

Output growth

World GDP is estimated to have grown by around 1.4% in 2000 Q1, the fastest rate for more than five years (see Chart 1).(2) Growth was positive in most parts of the world. But world industrial production growth slowed to 6.6% in the year to April, from 7.5% in the year to February (see Chart 2a).(3) Industrial production growth has remained strong in the major economies, especially Japan (see Chart 2b), but has moderated somewhat in the emerging market economies from the fast pace seen over the past

(1) Based on data up to 28 July (the article in the May *Quarterly Bulletin* was based on data up to 27 April 2000).
(2) The numbers for world GDP growth are estimates based on quarterly data from national sources or quarterly data estimated from annual data reported in the April 2000 IMF *World Economic Outlook*.
(3) The numbers for industrial production growth are estimates based on data from the IMF *International Financial Statistics*.

Chart 2
Industrial production



Sources: Primark Datastream and Bank of England.

(a) India, Malaysia, South Korea, Taiwan and Thailand.
(b) Argentina, Brazil, Chile, Mexico, Peru and Venezuela.
(c) Czech Republic, Hungary, Poland, Russia and Turkey.

Table A
Forecasts for GDP growth

Per cent

	OECD (a)				Consensus (b)			
	2000		2001		2000		2001	
United States	4.9	*+1.8*	3.0	*+0.7*	4.8	*+0.2*	3.1	*+0.0*
Euro area	3.5	*+0.7*	3.3	*+0.5*	3.4	*+0.2*	3.2	*+0.2*
Japan	1.7	*+0.3*	2.2	*+1.0*	1.5	*+0.5*	1.6	*+0.1*
North East Asia (c)					7.8	*+0.6*	6.6	*+0.0*
South East Asia (d)					5.1	*+0.0*	5.2	*-0.1*
Latin America (e)					3.7	*+0.2*	4.1	*-0.1*
Eastern Europe (f)					3.8	*+0.6*	4.0	*+0.1*

(a) OECD *Economic Outlook*, June 2000; (differences from December 1999 in italics; percentage points).
(b) *Consensus Forecasts*, July 2000; (differences from April 2000 in italics; percentage points).
(c) Peoples' Republic of China, Hong Kong SAR, South Korea and Taiwan.
(d) Indonesia, Malaysia, Singapore, Thailand and the Philippines.
(e) 14 countries, including Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela.
(f) 19 countries, including the Czech Republic, Hungary, Poland, Russia and Turkey.

year or so, when many countries staged a rapid recovery from the 1998 crisis (see Chart 2c). In the year to April 2000, industrial production grew by about 11% in Asia, by about 6% in emerging Europe and by 4% in Latin America. These rates are close to those observed in early 1998, before the main effects of the Asian crisis.

As in previous quarters, world growth in 2000 Q1 was supported by the continuing expansion in the United States, which now extends to almost ten years, although the rate of expansion slowed in the first quarter. The steady recovery in the euro area continued, with GDP growth of 0.9% in the first quarter. Japan grew by 2.4% in the first quarter, partly boosted by leap year effects, for which the authorities make no statistical adjustment. GDP is estimated to have grown by 1.8% in non-Japan Asia, with several economies growing faster than expected. In Latin America, where the recovery from the emerging market crises has been slower, GDP growth strengthened to 1.2%, supported by strong export growth.

The strong growth of GDP in the first quarter has led to upward revisions in almost all forecasts for GDP growth in 2000 (see Table A). The OECD[1] forecast for GDP growth in the United States has been revised upwards to 4.9%, 1.8 percentage points higher than the previous OECD forecast six months ago, and 0.5 percentage points higher than the most recent forecast by the IMF.[2] Forecasts for the euro area have been revised up by less; GDP growth is now expected to be around 3.5% this year and between 3% and 3.5% next year. Forecasts have also been revised upwards for Japan, where GDP is expected to grow by around 1.5% in 2000 and by slightly more than 1.5% in 2001. These forecasts are broadly in line with the MPC's central projection in the August 2000 *Inflation Report*.

Forecasts for GDP growth in the emerging market economies have also been revised. Consensus forecasts have been revised upwards for Latin America, Eastern Europe and North East Asia for 2000, while forecasts for GDP growth in 2001 have been revised downwards somewhat for Latin America and South East Asia (see Table A). The OECD forecasts growth in South Korea to be 8.5% in 2000 and 6% in 2001.

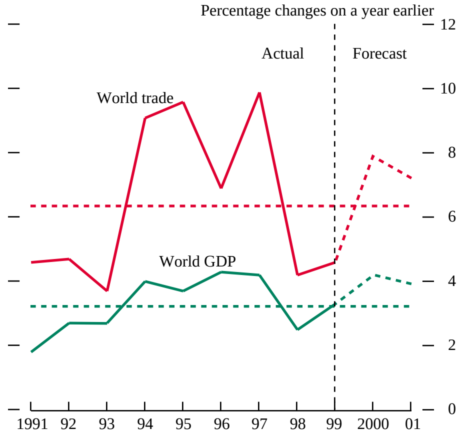
A feature of recent forecasts is a strong rebound in world trade, which increased by 4.6% in 1999, compared with an average annual growth rate of 6.4% for the period from 1991 to 1999 (see Chart 3).[3][4] The latest forecast by the IMF is for world trade to grow by about 8% in 2000 and by about 7% in 2001, while the OECD forecasts world trade to grow by about 10% in 2000 and by about 8% in 2001. This broad pattern is reflected in the MPC's central projection for the growth of UK export markets.

The United States

As in previous quarters, growth in the United States in Q1 was supported by buoyant private consumption, which on its own fully accounted for the 1.2% rise in GDP in the quarter (see Chart 4). Inventories made a negative contribution, possibly due to an unwinding of stocks following the millennium date change, and so did net trade, reflecting the strength of consumption and the dollar.

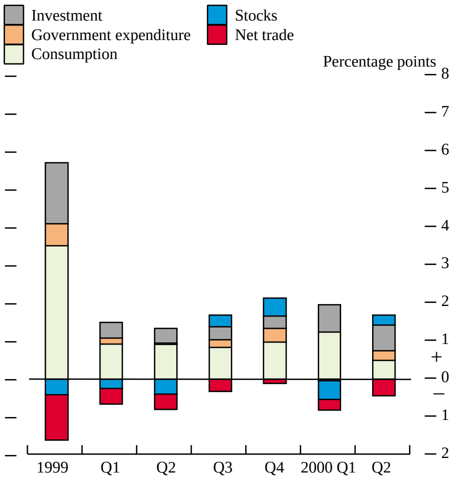
(1) OECD *Economic Outlook*, June 2000.
(2) IMF *World Economic Outlook*, April 2000.
(3) IMF *World Economic Outlook*, April 2000.
(4) Global capital flows are discussed in the note on pages 244–46.

Chart 3
World trade and GDP growth



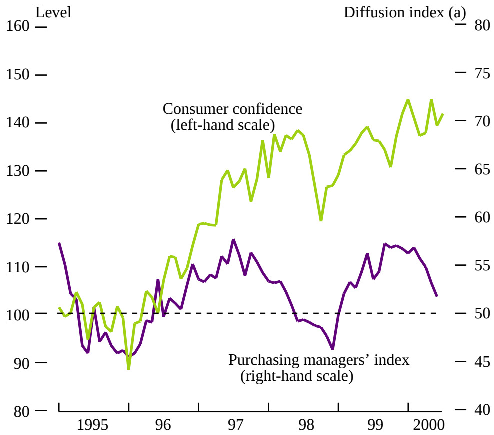
Source: IMF.

Chart 4
United States: contributions to GDP growth



Source: Primark Datastream.

Chart 5
United States: confidence measures



Source: Primark Datastream.

(a) A reading above 50 suggests expansion. A reading below 50 suggests contraction.

The large contribution from government spending in the previous quarter was partly reversed, and investment turned out markedly stronger, perhaps reflecting a delay of investment expenditure until after the turn of the century.

Industrial confidence, as measured by the National Association of Purchasing Managers' index, however, fell in June, for the fourth month running (see Chart 5), despite an increase in industrial production growth. Among the indicators for consumption, retail sales rose in June, but for the second quarter as a whole retail sales growth slowed compared to the previous quarter. And, on most measures, the housing market slowed; for example housing permits fell by 10.9% in the year to June. But the Conference Board's measure of consumer confidence rose in July, largely due to a more positive assessment of current economic conditions, and has remained at historically high levels for the past few months (see Chart 5).

According to the advance release of GDP for Q2, consumption has been relatively weak in the second quarter, which could be linked to equity price driven increases in spring tax payments leading to a temporary slowdown in consumption growth. In previous years, however, consumer spending has not been particularly weak in the relevant quarters, so it is not clear whether this is an important factor. The preliminary data, if confirmed, also suggest an end to the pattern observed in 1998 and 1999 of generally markedly slower GDP growth in the second quarter, with GDP growing by 1.3%, supported by strong investment.

Productivity growth in the United States slowed in 2000 Q1. Non-farm labour productivity rose by 0.6%, compared with 1.7% in the previous quarter, which was the highest quarterly growth rate since 1992 Q4. In Q1 the annual growth rate was 3.7%—above the average growth rate of 2.6% since 1996. Although it is possible that productivity growth will remain at these levels, a slowing rate of growth would be consistent with the usual pattern of weakening productivity during the later stages of the economic cycle.

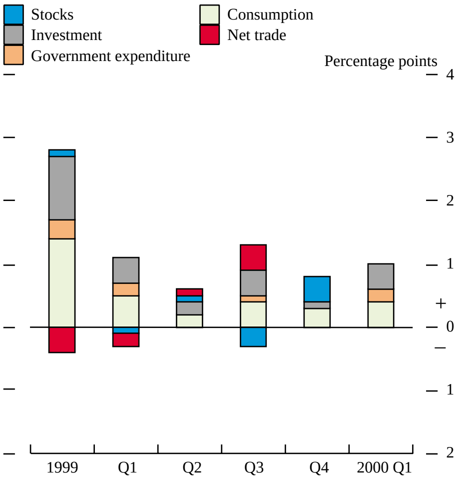
The euro area

Economic recovery continued in the euro area in the first quarter, with GDP growth of 0.9%, the same as in 1999 Q4. Consumption and investment made the largest contributions, and the contribution from government was 0.2 percentage points, which was greater than in previous quarters (see Chart 6).

Consumption growth in the euro area in Q1 reflected high levels of consumer confidence and falling unemployment (see Charts 7 and 11). Consumption was strong despite the late timing of Easter, which suggests that there may be a further strengthening in the second quarter. This proposition is supported by data on euro-area retail sales, which fell by 0.8% in March but then rose by 1.5% in April, and by consumer confidence, which remained at historical highs in the second quarter.

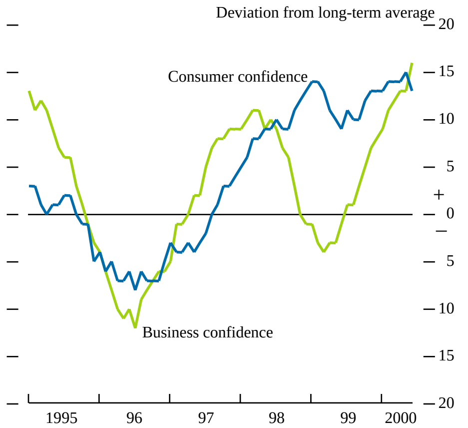
In line with the expansion of world trade noted earlier, euro-area exports and imports have increased strongly since the second half of 1999. In the first quarter, exports were 11.8% higher than a year earlier and imports were up by 10.3%. But net trade did not

Chart 6
Euro area: contributions to GDP growth



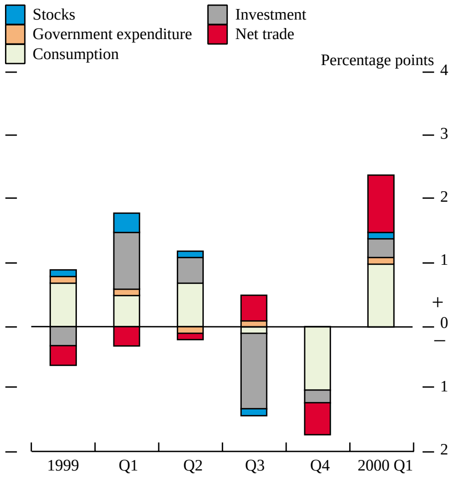
Source: Primark Datastream.

Chart 7
Euro-area business and consumer confidence



Source: Primark Datastream.

Chart 8
Japan: contributions to GDP growth



Source: Primark Datastream.

contribute strongly to GDP growth in 1999 Q4 and 2000 Q1, despite the depreciation of the euro effective exchange rate and robust growth in euro-area export markets.

Looking ahead, the outlook for activity in the euro area is favourable. Business confidence and export orders in June reached the highest levels recorded since the start of the series in 1985 (see Chart 7). The outlook for investment appears especially favourable; capital goods production has been strong and the July European Commission manufacturing investment survey suggested continued robust investment growth.

The previous *Quarterly Bulletin* noted that growth had been weak in Germany and Italy relative to the euro area for the past three years. In the first quarter, growth rates for these two economies picked up, especially in Italy, where GDP grew by 1% on the quarter. This continues the pattern of a narrowing dispersion of growth rates in the euro area (as measured by the standard deviation) over the second half of 1999.

Japan

In Japan, GDP rose by 2.4% on the quarter in 2000 Q1. In contrast to the pattern in recent years, growth was supported by private sector spending and investment, rather than government spending (see Chart 8). Net trade also contributed positively.

Private investment growth was particularly strong in 2000 Q1. It is not clear to what extent the strength in investment reflects a cyclical recovery. Orders data suggest that investment growth may have peaked, but it may be sustained by the increase in corporate profits since the beginning of the year, given that it is typically financed through retained earnings. As noted in the May *Quarterly Bulletin*, further increases in profits may also boost incomes and consumption through bonus payments.

The Bank of Japan Tankan survey for June showed a further improvement in business conditions. Among large manufacturers, a majority of firms expect business conditions to improve, for the first time since 1997 (see Chart 9). As in the previous survey conducted in March, large firms were more optimistic than small firms, and manufacturers were more optimistic than non-manufacturers.

Labour markets

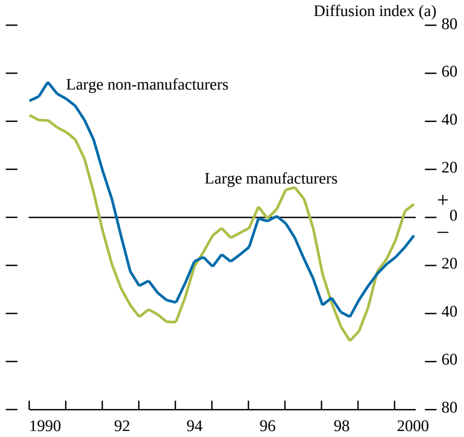
Employment/unemployment

Employment has continued to increase in the United States, but at a slower pace. Private sector non-farm payrolls increased by an average of 110,000 per month in the second quarter, after an average increase of 244,000 per month during the first quarter.(1) On the three-months-on-three-months measure, growth of private sector payrolls declined to 0.5% in June, the lowest rate since July 1999 (see Chart 10).

Employment has also continued to increase in the euro area. However, as the ECB recently noted, the rise in employment has

(1) Total employment in the months since March was boosted by temporary workers employed for the Census. The Bureau of Labor Statistics puts the change in the number of census workers at +117,000 in March, +73,000 in April, +357,000 in May and -190,000 in June.

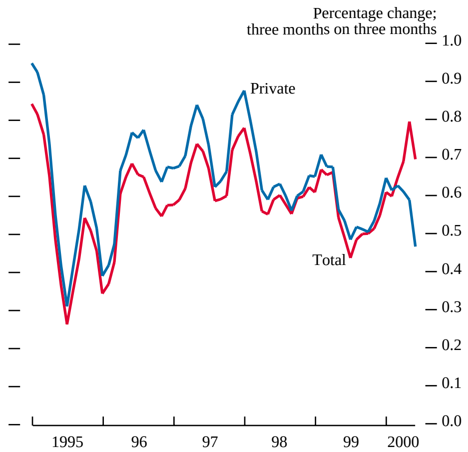
Chart 9
Japan: Tankan index of business conditions



Source: Bank of Japan.

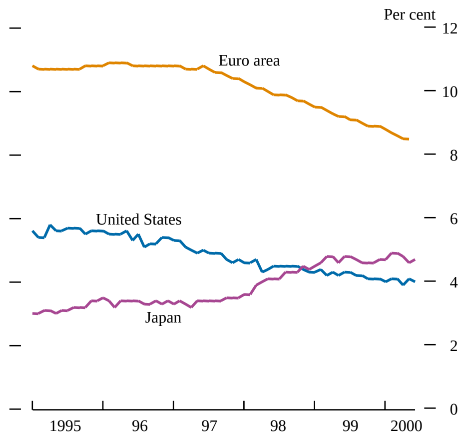
(a) A positive reading suggests expansion. A negative reading suggests contraction.

Chart 10
United States: payrolls



Source: Primark Datastream.

Chart 11
Unemployment rates



Source: Primark Datastream.

not yet increased labour force participation to the same extent as in the United States in the past three decades.(1) At the end of 1999, participation rates were about 78% in the United States and 66% in the euro area. Employment has continued to fall in Japan despite a rise in the ratio of new job offers to applicants.

The US unemployment rate was 4.0% in June, around its average over recent months (see Chart 11). The unemployment rate in the euro area continued to fall steadily, reaching 9.2% in April and May, compared with 10% a year earlier. Relative to the United States, unemployment in the euro area remains high, especially among those with low skills and the young, and this is reflected in a larger number of long-term unemployed. In Japan, the unemployment rate was 4.7% in June, at its average rate in the second half of 1999.

Labour costs

Labour cost pressures in the United States remain muted in relation to the strong employment position. Average hourly earnings rose by 3.6% in the year to June, the same as in May, and the annual growth rate of unit labour costs remained at 0.6% in 2000 Q1 for the second quarter in a row, the lowest rate of increase since 1996 Q4. This picture of moderate growth in labour costs is also reflected in the Employment Cost Index for Q2, which grew by 4.3% overall, unchanged from Q1.

In the euro area, by contrast, labour costs (based on the hours measure) rose sharply in the first quarter, by 3.5%, after 2.4% in the year to 1999 Q4. This may be partly related to bonus payments, some of which may have been linked to the century date change. But it may also be because, despite the fact that unemployment remains relatively high, labour market conditions are becoming tighter due to geographical and skill mismatches in the labour force.

Among the euro-area countries, labour cost growth was particularly high in France. This may be partly due to the reduction in the working week in France, as discussed in the May *Quarterly Bulletin*. Labour cost growth was also higher in Germany and Italy, where activity picked up relative to the other euro-area countries in 2000 Q1.

Prices

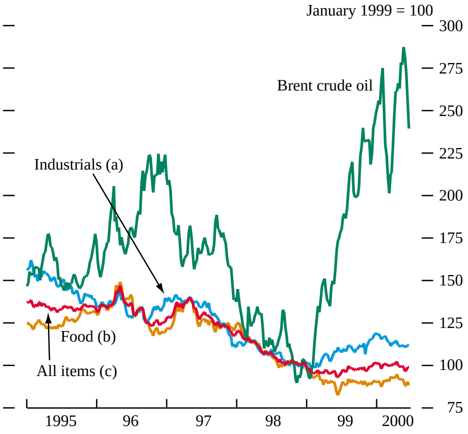
Commodity prices

Non-oil commodity prices have remained broadly unchanged in dollar terms in the period under review (see Chart 12). The *Economist* index declined by 1% due to reductions in non-oil industrial commodity prices and food prices.(2) All three indices bottomed out in the course of 1999, reflecting increased demand due to the strength of the world economy.

Oil prices have been volatile over the period and the price was $26.7 for Brent crude on 28 July, compared with $24 three months ago. The price had been higher in the intermediate period and

(1) See 'Developments in and structural features of the euro-area labour markets', ECB *Monthly Bulletin*, May 2000, pages 57–72.
(2) The chart shows the new *Economist* index, in which the weight of industrials is 42.5% and the weight of food is 57.5%. The corresponding weights in the old index were 47.4% and 52.6% respectively.

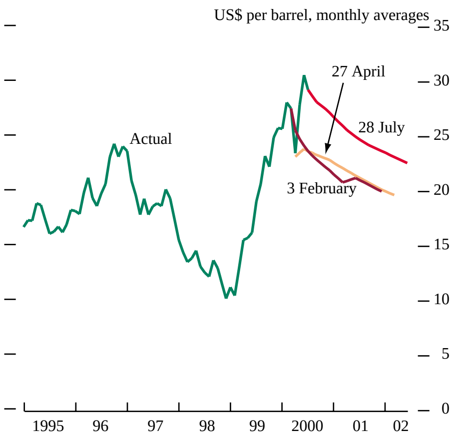
Chart 12
Commodity prices



Source: Primark Datastream.

(a), (b), (c) The *Economist* index, all items and industrials excluding oil.

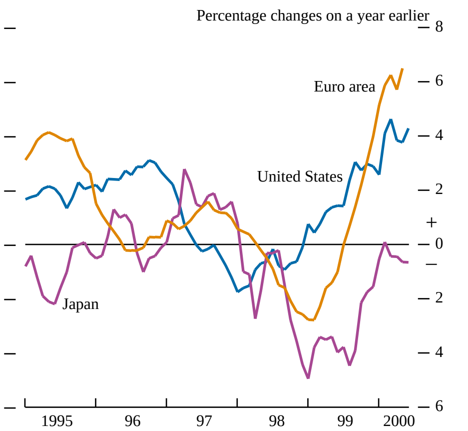
Chart 13
Oil futures



Note: The actual figure for July 2000 is the average of 1 July–27 July 2000.

Source: Bloomberg.

Chart 14
Producer prices



Source: Primark Datastream.

peaked on 3 July at $32.5, the same as the previous peak on 7 March. In June, members of the Organisation of Petroleum Exporting Countries (OPEC) agreed to a further increase in production targets to 25.4 million barrels per day,(1) and in early July Saudi Arabia announced that it might raise production by 0.5 million barrels per day if prices did not fall, although they have fallen subsequently.

Crude oil stocks have been below their long-term average for much of the past year, although the increase in production in June should help rebuild stocks and alleviate forecasts of a shortfall in supply for the remainder of 2000. Given the outlook for the oil market, most market participants now do not expect the price of Brent crude oil to fall below $20 per barrel within a two-year period. This is reflected in the futures curve of 27 July (see Chart 13), which shows price increases in contracts for all delivery dates since the previous *Quarterly Bulletin*.

Producer prices

There has been a pick-up in producer price inflation in the United States, which reflects the renewed rise in oil prices from mid-April to June. The headline producer price index increased by 4.3% in the year to June, compared with a recent peak of 4.6% in March (see Chart 14). The core index, which excludes food and energy, however, rose by 1.3% over the same period. A similar picture exists for the euro area, where the overall index increased by 6.5% in the year to May, from 5.7% in the year to April. In Japan, the wholesale price index fell by 0.6% in the year to June.

Consumer prices

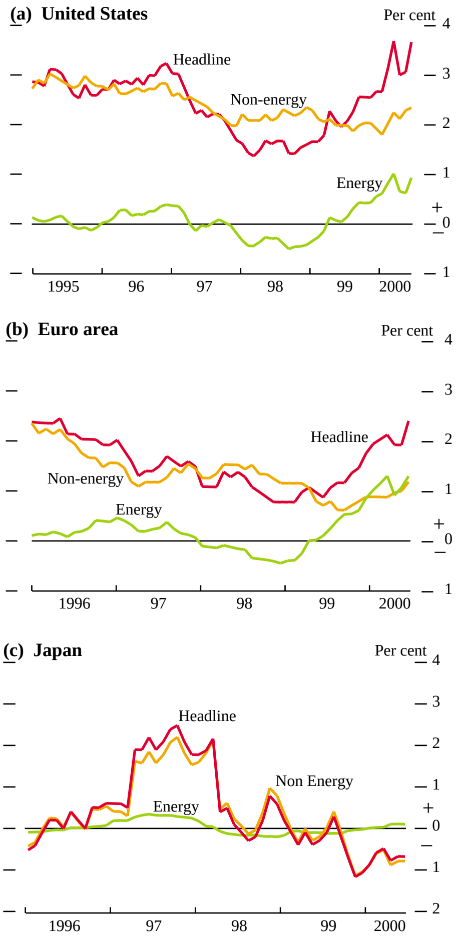
The recent fluctuations in oil prices are reflected in the contribution of energy prices to headline CPI inflation, which rose in the United States and the euro area in June after falling in April and May (see Chart 15). This suggests that oil prices have a quite rapid effect on headline consumer prices.(2)

In the United States, core and headline consumer price inflation increased in June, to 2.4% and 3.7% respectively, over the past year. In the euro area, consumer price inflation in the year to June rose by 0.5 percentage points to 2.4%, above the upper bound of 2.0% which the ECB defines as inflation consistent with price stability.(3) Core inflation was 1.2% in June, 0.2 percentage points higher than in the previous month.

In June, core HICP inflation in the euro area was highest in Portugal (2.8%) and Spain (2.7%) and lowest in France (0.2%).(4) To some extent these differentials reflect differences in cyclical positions, as noted in the May *Quarterly Bulletin*. However, another factor that may be important is the depreciation of the euro and its differential impact on effective exchange rates and import

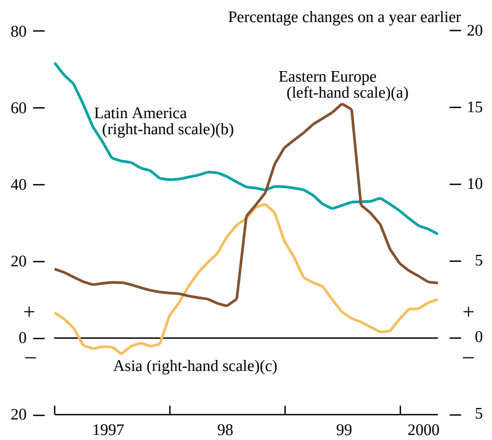
(1) OPEC press release, Vienna, 21 June 2000. This is 0.7 million barrels per day more than estimated production in 2000 Q1, but only 0.2 million barrels more than the estimated production prior to the meeting. It is estimated that OPEC production accounted for approximately 40% of world production in 1999.
(2) A note in the May 2000 *Quarterly Bulletin* looked at the question: 'What do the recent movements in oil prices imply for world inflation?'; see pages 147–49.
(3) Only one euro-area economy (France) had an inflation rate of less than 2% on the HICP measure.
(4) The highest headline CPI inflation rate currently is in Ireland (5.4%).

Chart 15
Contributions to CPI inflation



Source: Primark Datastream.

Chart 16
Emerging market consumer prices



(a) Czech Republic, Hungary, Poland and Russia.
(b) Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela.
(c) Peoples' Republic of China, India, Indonesia, Malaysia, South Korea, Taiwan and Thailand.

prices in different euro-area economies. This is discussed in the box on pages 240–41, which finds that the exchange rate has had a limited impact on inflation differentials so far.

In Japan, headline consumer prices were 0.7% lower in June than a year earlier. The persistence of negative consumer price inflation can be attributed to a number of factors, among them lower import prices that reflect recent yen appreciation. The decline in goods prices rise has slowed, however, partly reflecting the recent rise in petroleum-product prices.

Despite the rapid recovery in activity and the strengthening of energy prices, there have been few signs of inflationary pressures in emerging Asian economies (see Chart 16). This is partly due to exchange rate appreciation caused by increased capital inflows to these countries. But pressures may emerge as capacity utilisation returns to pre-crisis levels, and if the authorities seek to contain upward movements in the exchange rate. In Latin America, inflation rates have continued to fall in most countries, albeit from a level above the average for emerging market economies. Argentina continues to experience price deflation.

Looking forward, the OECD[1] has revised upwards its forecast for inflation in the United States in 2000 from 1.9% to 2.1% (see Table B). The OECD forecast for euro-area inflation was unchanged at 1.5% for 2000, but revised upwards for 2001, to 1.9%. Inflation is expected by the OECD and Consensus Economics to remain negative in Japan, at least for 2000.

Consensus forecasts for CPI inflation in 2000 in the emerging market economies have been revised upwards only for North East Asia, by 0.4 percentage points (see Table B). In other cases, forecasts have been revised downwards, in line with downward revisions to growth rates and reflecting the continuing shift in monetary regimes towards tighter inflation control.

Monetary policy and financial markets[2]

Official interest rates in the United States and the euro area increased by 1.25 and 1 percentage points respectively from their troughs in the first half of last year to the time of the May *Quarterly Bulletin*. Since then, they have been raised by a further 0.5 percentage points, to 6.5% and 4.25% respectively. Interest rate futures contracts suggest that, as of 27 July, markets expect short-term interest rates in the United States and the euro area to rise to about 7% and to between 5.25% and 5.5% respectively by mid-June 2001. Three months ago, expectations were for these interest rates to rise to about 7.25% and 4.75% respectively by the end of the year.

On 16 May, the FOMC raised the Federal funds target rate from 6% to 6.5%, the first rise of 0.5 percentage points since early 1995 (see Chart 17). The FOMC stated that 'increases in demand have remained in excess of even the rapid pace of productivity-driven gains in potential supply, exerting continued pressure on resources'.[3] It said it believed that 'the risks are

(1) OECD *Economic Outlook*, June 2000.
(2) For details on movements in foreign exchange, equity and bond markets, see the 'Markets and operations' article on pages 217–32.
(3) FOMC press release, Washington DC, 16 May 2000.

Euro depreciation and inflation differentials

Euro-area economies vary widely in their exposure to non euro area trade. This implies that the depreciation of the euro since the start of EMU may give rise to differing imported inflationary pressures between the economies within the euro area, at least in the short run. Empirical work suggests that so far the euro depreciation has not had a clearly identifiable effect on inflation. But a macroeconomic model simulation that also takes account of some of the indirect effects suggests that the depreciation of the euro could cause inflation differentials to increase in the short term.

Although nominal exchange rates between members of EMU are fixed, effective exchange rates still vary. The exposure of individual euro-area economies to trade with non euro area countries, and so to movements in the euro exchange rate, varies significantly.

Table 1 shows the share of total imports of goods accounted for by non euro area countries for each euro-area economy. Imports from non euro area countries ranges from 81% in Ireland to 31% in Portugal.

Table 1
Euro area (goods) imports' shares

Per cent

	Imports from non-EU11 as share of total imports	Share of non-EU11 imports in GDP	Change in NEER (a) 1 January 1999 to 26 July 2000
Ireland	81.4	42.3	-8.5
Finland	64.6	16.3	-7.1
Germany	56.8	12.2	-6.2
Netherlands	52.9	24.8	-5.1
Italy	47.8	8.5	-4.9
France	46.7	9.3	-5.0
Spain	42.8	9.8	-4.3
Belgium	41.3	27.1	-4.4
Austria	35.8	11.6	-3.2
Portugal	31.1	10.7	-4.0

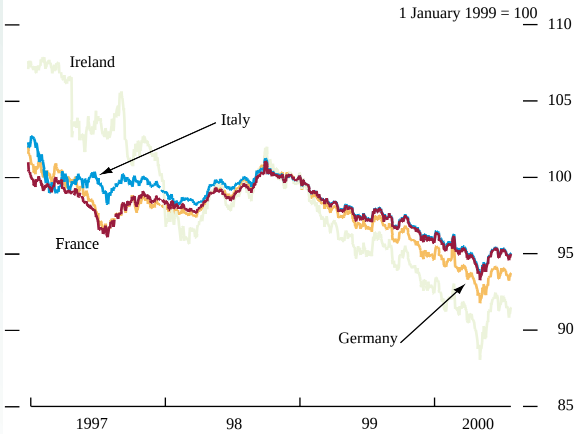
Sources: OECD, Eurostat and Bank of England.

(a) Nominal effective exchange rate.

These differing trade weights have given rise to differing movements in the nominal effective exchange rates (NEERs) of euro-area countries as the euro has depreciated (see Chart A). The depreciation in Ireland's NEER was around 8.5% from the beginning of 1999 until July 2000. In contrast, over the same period, France's trade-weighted exchange rate depreciated by 5.0%.

The direct effect of the euro depreciation on import prices in each euro-area country will depend upon the share of non euro area imports in total imports. But the final direct effect on consumer prices will also depend upon the share of total imports in output. As Table 1 shows, extra euro area imports comprise 42.3% of GDP in Ireland, but only 24.8% in the Netherlands and less in larger countries.

Chart A
Nominal effective exchange rates



Sources: Primark Datastream and Bank of England.

The increases in import prices will also have indirect effects on consumer prices via the boost in net trade from the depreciation, and any increase in wage pressures. A simple simulation on NIGEM,(1) in which the euro depreciates by 10% against the dollar, illustrates these effects more fully.

Since the import price increase that follows the devaluation is essentially a price level shock, the effects on inflation differentials within the euro area should be a fairly short-run phenomenon. But, as Table 2 and Chart B show, these short-run price level changes are different across the EU11 after the first and second years of the simulation.

Table 2
Simulation results

Percentage change from base

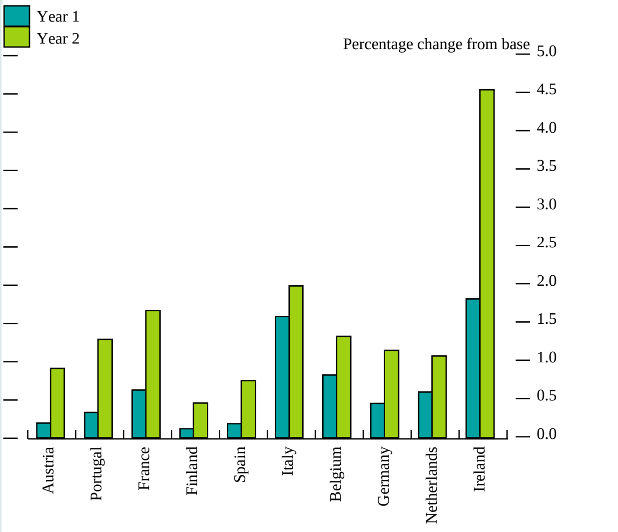
	Import prices		Consumption deflator	
	Year 1	Year 2	Year 1	Year 2
Austria	1.3	4.5	0.2	0.9
Portugal	4.5	4.7	0.3	1.3
France	5.0	5.0	0.6	1.6
Finland	5.0	5.0	0.1	0.4
Spain	5.2	5.2	0.2	0.7
Italy	5.3	5.3	1.6	2.0
Belgium	5.4	5.5	0.8	1.3
Germany	6.0	5.7	0.4	1.1
Netherlands	6.0	5.8	0.6	1.1
Ireland	7.5	6.8	1.8	4.5

Ireland, the most exposed economy in the euro area to non euro area imports, experiences by far the

(1) The macroeconomic model of the National Institute for Economic and Social Research.

largest short-run price level increase following the currency depreciation. Spain, which is one of the least exposed economies to non euro area trade and has a relatively small share of non euro area imports to GDP, has one of the smallest price level increases.

Chart B
Consumer expenditure deflator



Source: Bank of England.

How do the simulated changes in inflation differentials compare with the changes observed so far in the data? During 1999 and the first half of 2000, oil price increases and the weakness of the euro have been the main influences on euro-area inflation. These factors have put upward pressure on import and consumer prices, making it difficult to disentangle exchange rate effects from energy price increases. Nevertheless, it is possible to draw some broad conclusions.

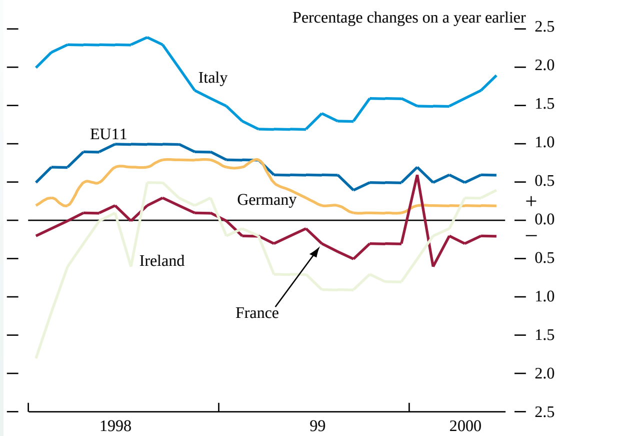
Euro-area import prices increased by 0.2% over 1999. The average depreciation in the euro effective exchange rate was 5.7%. Import price inflation has generally been less strong than may have been expected: the results from the NIGEM simulation would have suggested a higher rate of pass-through into euro-area import prices in the first year. And a significant part of the observed rise in import prices may also reflect energy price increases, suggesting an even lower exchange rate pass-through.

The reduced pass-through from euro depreciation to import price rises provides an interesting comparison with the United Kingdom, where sterling's appreciation appears not to have been passed through fully into lower import price inflation. One possible explanation for these muted pass-throughs may be that the depreciation of the euro against sterling has been viewed as temporary. Consequently importers into the euro area and the United Kingdom may have held back on increasing and reducing import prices respectively.

Further along the price chain there is also only limited evidence of marked exchange rate pass-through in the euro area. Most of the change in annual inflation on the harmonised measure (HICP) between January 1999 and June 2000 in each of the euro-area economies reflected changes in goods inflation rather than services. But, once again, these changes also reflect energy price movements.

The clearest sign of a *specific* exchange rate effect is likely to be found in the non-energy industrial goods component of HICP. But, as shown in Chart C, there has been no noticeable increase in inflation rates in this category in the EU11 over the past year, although there is some evidence for rising inflation in Ireland and, to a lesser extent, Italy. And the dispersion of these inflation rates, as measured by the standard deviation, was unchanged over 1999. So it is difficult so far to see a marked increase in inflation differentials in the euro area that could be attributed to the euro depreciation.

Chart C
Non-energy industrial goods inflation



Source: Eurostat.

But effects as large as those produced by the model simulation are perhaps unlikely to appear in practice. This is partly because the euro depreciation has occurred over a period of more than twelve months rather than as an instantaneous shock. The pass-through may also be more muted if the relative weakness of the euro has partly been seen as a temporary phenomenon. Under these circumstances, importers into the euro area may have allowed their margins to fall in order to maintain market share.

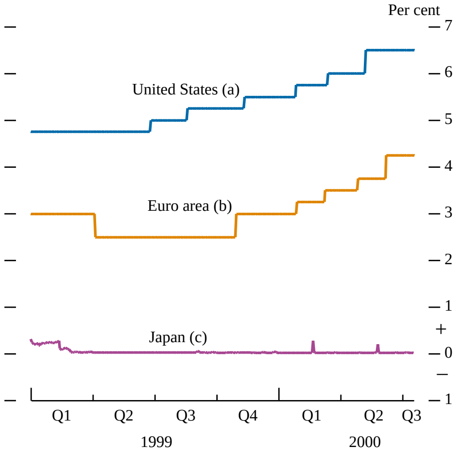
Table B
Forecasts for CPI inflation

Per cent

	OECD (a)				Consensus (b)			
	2000		2001		2000		2001	
United States	2.1	*+0.2*	2.3	*+0.0*	3.2	*+0.4*	2.6	*+0.1*
Euro area	1.5	*+0.0*	1.9	*+0.3*	1.9	*+0.2*	1.7	*+0.1*
Japan	-0.8	*-0.3*	-0.1	*+0.2*	-0.4	*-0.2*	0.0	*-0.1*
North East Asia (c)					1.2	*+0.4*	2.3	*-0.2*
South East Asia (d)					3.3	*-0.3*	4.3	*-0.2*
Latin America (e)					7.0	*-0.4*	5.8	*-0.4*
Eastern Europe (f)					23.6	*-1.6*	15.0	*-0.6*

(a) OECD *Economic Outlook*, June 2000; (differences from December 1999 in italics; percentage points).
(b) *Consensus Forecasts*, July 2000; (differences from April 2000 in italics; percentage points).
(c) Peoples' Republic of China, Hong Kong SAR, South Korea and Taiwan.
(d) Indonesia, Malaysia, Singapore, Thailand and the Philippines.
(e) 14 countries, including Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela.
(f) 19 countries, including the Czech Republic, Hungary, Poland, Russia and Turkey.

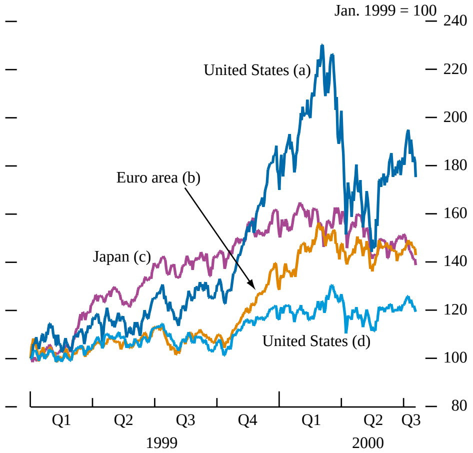
Chart 17
Official interest rates



Sources: Bank of Japan, ECB and Federal Reserve.

(a) Intended Federal funds rate.
(b) Refinancing rate.
(c) Uncollateralised overnight rate (market rate).

Chart 18
Equity prices



Sources: Bloomberg and Primark Datastream.

(a) Nasdaq.
(b) Euro Stoxx.
(c) Topix.
(d) Wilshire 5000.

weighted mainly toward conditions that may generate heightened inflation pressures in the foreseeable future', a view that it maintained when it decided at its June meeting to leave rates unchanged.(1)

The ECB raised the refinancing rate for the euro from 3.5% to 3.75% on 27 April and to 4.25% on 8 June (see Chart 17). With effect from 28 June, the main refinancing operations have been conducted as variable-rate tenders, with 4.25% as the minimum bidding rate. The ECB has pointed out that 'the switch to variable rate tenders ... is not intended as a further change in the monetary policy stance of the Eurosystem', but 'a response to the severe overbidding which has developed in the context of the ... fixed rate tender procedure'.(2)

The Bank of Japan (BoJ) has maintained the zero interest rate policy adopted in February 1999 and, as a result, the overnight rate has continued to fluctuate in a narrow range close to zero (see Chart 17). Following the meeting of the Monetary Policy Board on 17 July, the BoJ noted that 'Japan's economy is coming to a stage where deflationary concerns are dispelled, which the Board have clearly stated as the condition for lifting the zero interest rate policy'.(3)

During the period under review, there has been no obvious trend in the major equity indices. Volatility has been moderate, except for technology-intensive indices like the Nasdaq index in the United States (see Chart 18), where the relatively high volatility probably reflects uncertainties about the outlook for the technology sector. The sharp falls in the Nasdaq index during April and the associated equity market volatility were accompanied by a fall in emerging market equity prices. The levels of volatility of emerging market equity and bond prices have fallen back after rising during this period, and are now below the levels recorded at the time of the Russian and Brazilian crises.

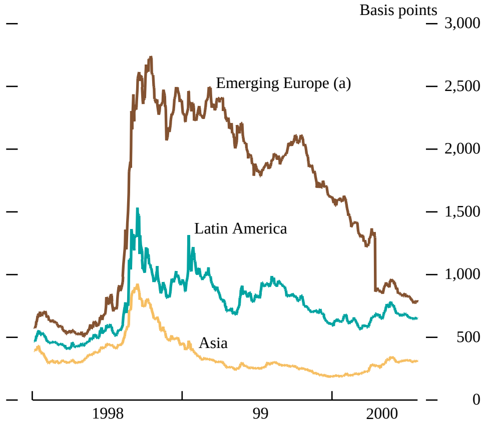
Despite the strong growth in the emerging market economies since the height of the Asian crisis, the cost of external finance remains higher than the pre-crisis levels. Similarly, average credit ratings have not yet returned to their pre-crisis levels. Since the May 2000 *Quarterly Bulletin*, spreads over US Treasuries have been broadly unchanged for Latin America and emerging Europe, and have increased slightly for Asia (see Chart 19). Aggregate spreads, excluding Russia and Ecuador, however, have risen by around 100 basis points since the start of the year.(4)

External balances

In the United States, the current account deficit widened further to 4.2% of GDP in 2000 Q1 (see Chart 20). The current account has been in deficit since 1991 Q3. In the euro area, the current account moved to a deficit of 0.5% of GDP in 2000 Q1, compared with an average surplus of 0.4% over the past year. In Japan, the current

(1) FOMC press release, Washington DC, 28 June 2000.
(2) ECB press release, Frankfurt am Main, 16 March 2000. The variable rate operations to date allotted funds at a marginal rate of 4.29% and a weighted average rate of 4.30%.
(3) Bank of Japan press release, Tokyo, 17 July 2000.
(4) Spreads have been volatile for Ecuador, which defaulted on Brady bonds last year, and Russia, following the resolution of debt negotiations with its London Club creditors.

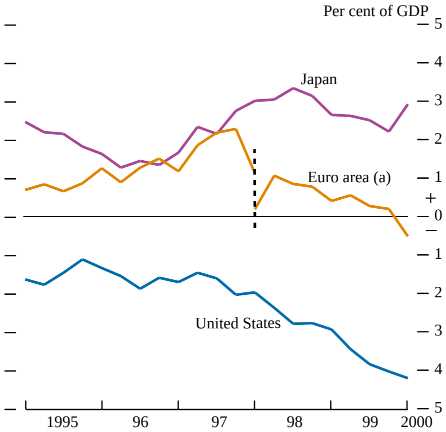
Chart 19
Sovereign bond yield spreads



Source: J P Morgan.

(a) Russian principal loans and interest rate arrears loans (both restructured commercial bank loans) were taken out of the index on 14 April and replaced by eurobonds to be issued in exchange.

Chart 20
Current account balances



Source: Primark Datastream.

(a) Vertical line indicates a break in the series.

account surplus widened from 2.2% of GDP in 1999 Q4 to 2.9% in 2000 Q1.

Sizeable current account deficits persist in Latin America. By contrast, aggregate current account surpluses in non-Japan Asia are expected to be around $32 billion during 2000, according to the most recent IMF *World Economic Outlook*, somewhat larger than expected at the end of 1999. This divergence in current account positions may offer one explanation for the different behaviour of spreads in the two regions.

Developments in capital and financial accounts are reviewed in more detail and over a longer period in the note on pages 244–46.

Global capital flows

This note reviews developments in global capital flows over the past two years.

- *There have been large inflows of foreign direct investment (FDI) and portfolio investment into the United States.*
- *There have been large net outflows of direct and portfolio investment from the euro area. This may reflect portfolio re-adjustment by fund managers following the start of EMU, and may be coming to an end.*
- *Foreigners have been net buyers of European equities, contributing to the strong performance of European equity indices.*
- *In Japan, net outflows of 'other investment' fell sharply in 1999, possibly reflecting the retrenchment by Japanese banks from international markets.*
- *Flows of FDI and equity portfolio investment into developing countries rose slightly between 1998 and 1999.*

The global picture

Table 1 summarises global current and financial account balances in 1998 and 1999. Much of the picture is familiar; large current account deficits in the United States balanced by large capital inflows; current account surpluses in Japan and the euro area, offset by net financial outflows. A feature of 1999 was the sharp reduction in current account deficits in the developing and transition economies, from a combined $115 billion in 1998 to only $38 billion in 1999. While the financial balance also declined, it is interesting to note that direct investment and portfolio investment equity flows into the developing countries as a whole *rose* slightly between 1998 and 1999.(1)

Table 1
Current and financial account balances

US$ billions

		Current account	Financial account	Capital account	Errors
1998	United States	-221	210	1	10
	Japan	121	-110	-14	4
	Euro area	49	-79	16	15
	United Kingdom	-1	-10	1	10
	Developing	-90	117	7	-35
	Transition	-25	23	-1	3
1999	United States	-339	387	1	-39
	Japan	107	-85	-17	-6
	Euro area	25	-70	16	30
	United Kingdom	-21	13	-1	7
	Developing	-33	44	6	-17
	Transition	-5	4	1	0

Notes: Current account + financial account + capital account + net errors = 0. Figures may not sum exactly due to roundings.
Sources: IMF, ECB, Bank of England and national statistical agencies.

Comprehensive balance of payments data are not available for the other two main groups of countries not shown in the table, ie other advanced economies and the newly industrialised Asian economies. These two groups ran large current account surpluses in both 1998 and 1999.

Change in methodology

In April 2000 the ECB adopted a new methodology(2) for compiling the income component of the euro-area current account. This has substantially increased the deficit on the income account, and correspondingly reduced the surplus on the current account for the years 1997 to 1999. The estimated surplus in 1999 is now around a half of the level previously estimated. Even after these revisions, the errors and omissions component of the euro-area balance of payments remains large.

Financial flows in the major economies

Table 2 shows a breakdown of the financial balances in the United Kingdom, United States, Japan and the euro area for 1998 and 1999. The data are all shown in US$ billion for ease of comparison.

(1) IMF *World Economic Outlook*, June 2000. The fall in financial flows is accounted for by lower net external borrowing and borrowing from the IMF by developing countries. This was almost $50 billion lower in 1999 than in 1998.
(2) The main revision is the treatment of interest on dividends on portfolio investment paid to non euro area residents. Where these are paid via central securities depositories in the euro area, some had been incorrectly allocated to the intermediaries and hence to the euro area.

Table 2
Financial account

Annual data, US$ billions

	Direct investment	Portfolio investment	Other investment	Reserve assets	Financial account
United Kingdom					
1998	-56	-28	74	0	-10
1999	-116	166	-38	1	13
United States					
1998	61	164	-8	-7	210
1999	130	237	2	9	378
Japan					
1998	-21	-40	-56	7	-110
1999	-11	1	1	-85	-84
Euro area					
1998	-118	-96	125	10	-79
1999	-147	-34	96	15	-70

Notes: The financial account is the sum of the first four columns.
Figures may not sum exactly due to roundings.
A negative sign on the financial account means net capital outflows.
An increase in reserves is shown as a negative.

- There have been substantial outflows from the euro area of both direct investment and portfolio investment of around $200 billion each year in total.

- These were partly offset by net inward ‘other investment’, as liabilities of the banking sector to the overseas sector increased substantially. This ties in with other data (eg BIS international bank assets data) showing that European banks have expanded their international activities and international funding.

- The United States has experienced large inflows of investment. In 1999 combined inflows of net direct and portfolio investment reached around $370 billion. The net position on ‘other investment’ has been broadly balanced.

- In Japan there has been a change in the composition of the financial account over the past two years. In 1998 there were large net outflows of portfolio and other investment. In 1999 the net outflow of other investment fell almost to zero, possibly reflecting Japanese banks’ continued retrenchment from international markets. Japan’s reserve assets rose by $80 billion, however, reflecting Bank of Japan purchases of foreign currency. In effect, the central bank rather than private residents acquired the foreign assets accumulated as the counterpart to the current account surplus. This has been interpreted in the markets as limiting the appreciation of the yen.

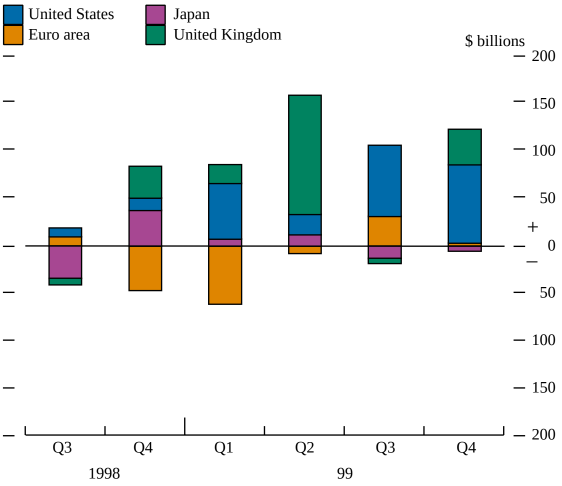
- Net outward portfolio investment in Japan fell by about $40 billion between 1998 and 1999. The net figure, however, masks a far bigger increase in foreigners’ purchases of Japanese stocks, which rose from ¥19 billion in 1998 to a record ¥120 billion in 1999, contributing to the strength of the Japanese equity market. (The offsetting factors in net portfolio investment were a fall in foreigners’ net purchases of Japanese bonds and an increase in Japanese residents’ net purchases of overseas securities.)

- In the United Kingdom, there was a substantial net outflow of direct investment in 1999, but this was more than offset by a net inflow of portfolio investment. These data are dominated by two large takeover deals of foreign firms by UK firms in the second quarter.(1) These are recorded in the balance of payments as offsetting movements in outward direct investment and inward portfolio investment. (The deals were financed in effect by allocating shares in the UK firms to overseas holders of equity in the firms taken over.)

Quarterly pattern of portfolio and direct investment

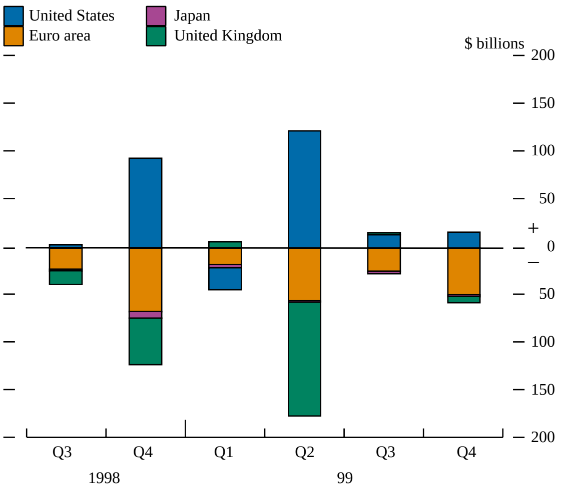
The annual data presented above obscure some interesting developments during the course of 1999. The charts below show the quarterly pattern of portfolio and direct investment

Chart A
Net portfolio investment



Sources: Bank of Japan, ECB, IMF and Office for National Statistics.

Chart B
Net direct investment



Sources: Bank of Japan, ECB, IMF and Office for National Statistics.

(1) Vodaphone Airtouch and Zeneca Astra.

in the United Kingdom, United States, Japan and the euro area over the six quarters to end-1999. In the euro area, direct investment has been uniformly outward on a net basis, but the pattern of portfolio investment has been more mixed.

Portfolio investment in the euro area

Anecdotal evidence suggests that one reason for large outward portfolio investment from the euro area is that, prior to EMU, European fund managers held a large proportion of domestic and other euro-area assets. Post EMU, they found themselves underweight in 'foreign' assets, since all euro-area assets were now 'domestic'. Fund managers' portfolio re-adjustment may therefore have accounted for the large portfolio investment out of Europe and into the United States and Japan.

In the bond markets, European residents were a large net buyer of overseas bonds in 1998 and the first half of 1999, but that reversed in the last six months of 1999, possibly suggesting that portfolio reallocation in bonds was reaching completion. The pattern in equity markets has been slightly different; indeed foreigners were large net *buyers* of euro equities in both 1998 and 1999, to the tune of about $100 billion per year—see Chart C.

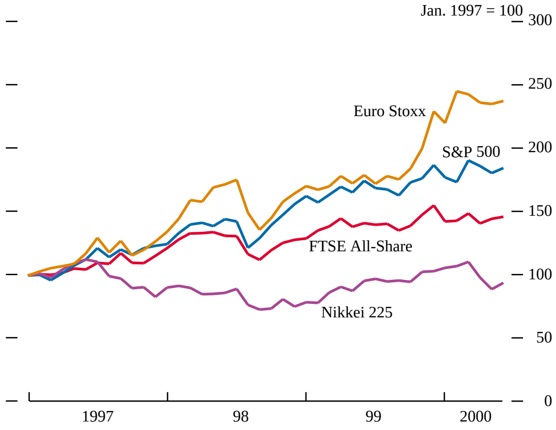
Developments in 2000

As Table 3 shows, there were substantial net inflows of portfolio investment to Japan in Q1, but this was more than offset by net outward flows of other investment. The recent trend of a build-up in official reserves continued.

The euro-area current account turned negative at the start of 2000. The financial account figures are dominated by the Vodaphone-Mannesmann takeover. As this was financed by an exchange of shares, it appeared in the accounts as a large direct investment inflow balanced by an equity outflow in portfolio investment.(1)

The final point—a useful cautionary note—is that the error terms for the most recent data tend to be large.

Chart C
International equity prices



Source: Bloomberg.

Table 3
Financial account

Quarterly data, US$ billions

	2000 Q1 Japan	Euro area	United Kingdom
Direct investment	0.1	147.2	-185.4
Portfolio investment	30.5	-178.5	183.1
Other investment	-48.1	90.8	3.8
Reserve assets	-19.5	-0.2	0.6
Financial account	-36.9	59.2	2.1
Net errors and omissions	9.8	-61.2	1.1
Current account	31.6	-1.2	-6.4

(1) The inward direct investment of €144.7 billion was more than double the value of direct investment in the euro area for the whole of 1999. Euro-area residents holding Mannesmann shares exchanged these for Vodaphone shares, showing up as an equity asset outflow, ie increased investment in foreign assets. There was also a fall in investment by non-residents, as Mannesmann shares that were owned by non-residents were exchanged for shares in Vodaphone. This reduced non-residents' investment in the euro area through an equity liability outflow. So there were outflows of equity assets and equity liabilities.